REMARKS

Claims 1-19 are pending.

The Title is objected to for not being descriptive. Applicant has amended the Title as indicated above.

Claims 12-18 are allowed. Claims 1-8 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 3,902,605 to Hamilton ("Hamilton"). Claims 1-3, 5-7, 9 and 10 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,453,755 to Blatt et al. ("Blatt"). Claims 1-3, 5-7, 9 and 10 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 3,967,849 to Cagle ("Cagle"). Claims 4 and 8 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Blatt or Cagle in view of U.S. Patent No. 6,039,529 to Persson ("Persson"). Claim 19 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Hamilton or Blatt or Cagle in view of U.S. Patent No. 5,056,464 to Lewis ("Lewis").

Applicant respectfully traverses the rejections under 35 U.S.C. §102 and 35 U.S.C. §103 for at least the reasons set forth below.

Applicant's Claimed Invention

Applicant's claimed invention is directed to an egg lifting apparatus 10 that includes a vacuum housing 12 having first and second passageways 16, 20, a removable venturi assembly 22 in fluid communication with the first and second passageways 16, 20, and a removable flexible cup 40 secured to the vacuum housing 12, wherein the flexible cup 40 comprises an interior 41 that is in fluid communication with the vacuum housing second passageway 20. The venturi assembly 22 produces subatmospheric pressure (vacuum) within the second passageway 20 upon the flow of air through the first passageway 16 (as indicated by arrow A_2). The flexible cup 40 is configured to engage and retain an egg in seated relation therewith when subatmospheric pressure is provided within the flexible cup interior 41 via the vacuum housing second passageway 20. Figs. 3-5 and 6A-6B from Applicant's specification are set forth below.

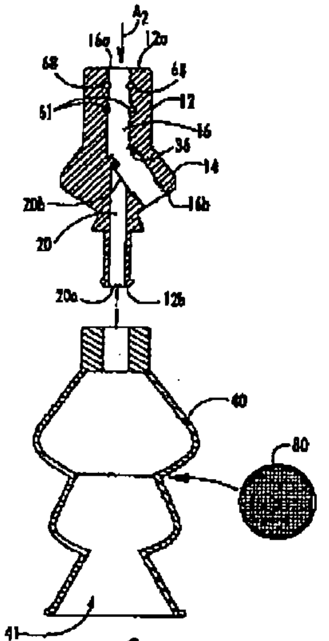


FIG. 3.

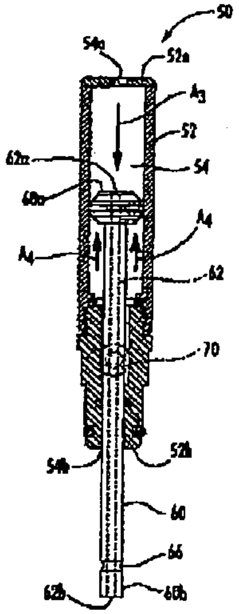


FIG. 5.

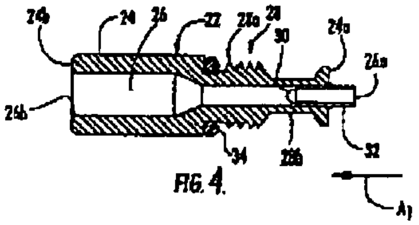


FIG. 4.

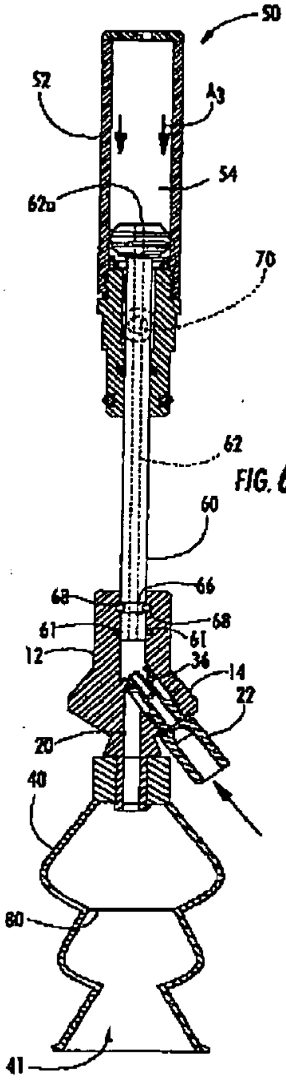


FIG. 6A.

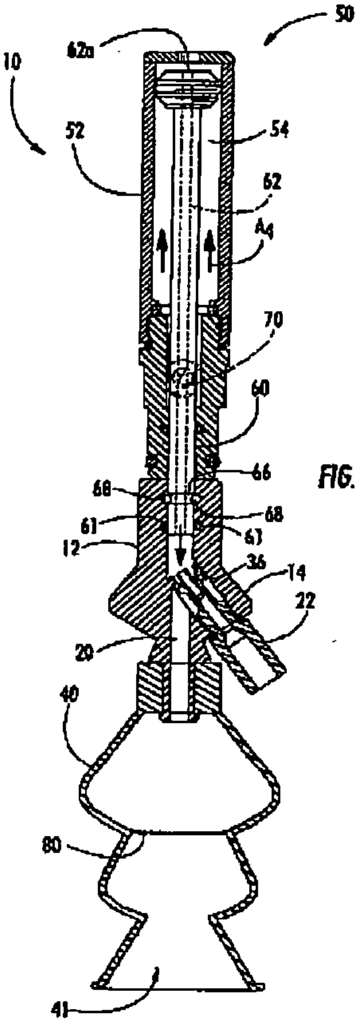


FIG. 6B.

Applicant's egg lifting apparatus 10 includes a plunger housing 52 and an elongated plunger 60 operably associated therewith. The plunger housing 52 includes opposite first and second ends 52a, 52b and an axially-extending internal bore 54 that terminates at respective first and second openings 54a, 54b in the plunger housing first and second ends 52a, 52b. The elongated plunger 60 includes opposite first and second ends 60a, 60b and an axially-extending internal bore 62 that terminates at respective first and second ports 62a, 62b in the plunger first and second ends 60a, 60b. The plunger first end 60a is slidably secured within the plunger housing internal bore 54 and the plunger second end 60b extends from the plunger housing second opening 54b and is secured to the vacuum housing first end 12a such that the plunger axial bore 62 is in communication with the vacuum housing first passageway 16 and with the plunger housing first opening 54a. The plunger second end 60b is removably secured to the vacuum housing first end 12a. The plunger 60 is configured for reciprocal movement between an extended and retracted position relative to the plunger housing 52. The plunger 60 is moved to an extended position upon the flow of air through the second port 62b into the plunger housing internal bore 54 through the plunger housing first opening 54a. The plunger housing 52 includes a third opening 70 that is in communication with the plunger housing internal bore 54. The plunger 60 is moved to a retracted position upon the flow of air through the second port 62b into the plunger housing bore 54. A screen 80 is positioned within the interior 41 of the flexible cup 40 and is configured to prevent foreign matter from being pulled into the second passageway 20 of the vacuum housing 22.

A method of cleaning and/or sterilizing Applicant's egg lifting apparatus includes immersing the flexible cup 40 in a bath of cleaning solution, and inducing vacuum within the interior 41 of the vacuum cup 40 by forcing air flow through the vacuum housing first passageway 16, wherein contaminants are pulled upwardly through the second passageway 20 and out the venturi assembly 22.

§102 Rejections Are Overcome

A claim is anticipated under 35 U.S.C. §102 if each claimed element is found in a single prior art reference. *Scripps Clinic & Research Foundation v. Genentech, Inc.*, 927 F.2d 1565, 1576 (Fed. Cir. 1991); *Carella v. Starlight Archery and Pro Line Co.*, 804 F.2d 135, 138 (Fed. Cir. 1986). There must be no difference between the claimed invention and the reference disclosure, as viewed by an ordinary artisan. *Scripps Clinic & Research Foundation v. Genentech, Inc.*, 927 F.2d at 1576.

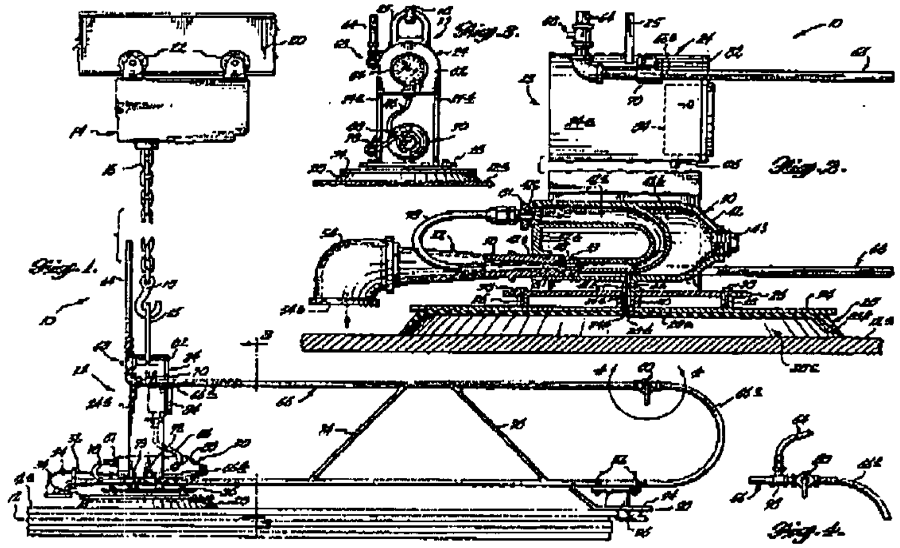
Applicant's amended Claim 5 recites an egg lifting apparatus comprising:

> a vacuum housing, comprising:
>
> opposite first and second ends, and an intermediate portion between the first and second ends;
>
> a first passageway extending through the vacuum housing between an inlet in the vacuum housing first end and an outlet in the intermediate portion;
>
> a second passageway extending through the vacuum housing between an inlet in the vacuum housing second end and an outlet in communication with the first passageway;
>
> a venturi assembly disposed within the first passageway outlet and in communication with the first passageway, wherein the venturi assembly comprises a throat section that is in communication with the second passageway, and wherein subatmospheric pressure is produced in the venturi throat section and second passageway upon the flow of air through the vacuum housing first passageway;
>
> a flexible cup secured to the vacuum housing second end and having an interior in communication with the second passageway, wherein the flexible cup is configured to engage and retain an egg in seated relation therewith when subatmospheric pressure is provided within the flexible cup interior via the second passageway;
>
> a plunger housing having opposite first and second ends and an axially-extending internal bore that terminates at respective first and second openings in the plunger housing first and second ends; and
>
> an elongated plunger having opposite first and second ends and an axially-extending internal bore that terminates at respective first and second ports in the plunger first and second ends, wherein the plunger first end is slidably secured within the plunger housing internal bore and the plunger second end extends from the plunger housing second opening and is secured to the vacuum housing first end such that the plunger axial bore is in communication with the vacuum housing first passageway and with the plunger housing first opening, wherein the plunger is configured for reciprocal movement between an extended and retracted position relative to the plunger housing, and wherein the plunger is moved to an extended

position upon the flow of air through the second port into the plunger housing internal bore through the plunger housing first opening.

Hamilton

Hamilton describes a suction lifting apparatus for lifting and moving panel-like articles, such as plywood, that are in a generally horizontal position. The Hamilton device includes a multidirectionally movable suction cup that depends from a hoist. Producing suction in this cup is an air-flow system including a Venturi device mounted adjacent the cup, a rigid loop-shaped conduit which extends from the Venturi device toward a bend in the conduit spaced to one side of the cup, and a flexible conduit connected above the cup to an end of the rigid conduit. A valve mounted near the bend in the rigid conduit controls air flow in the system. The rigid conduit serves, additionally, as a convenient handle for manipulating the cup. Figs. 1-4 of Hamilton are set forth below.

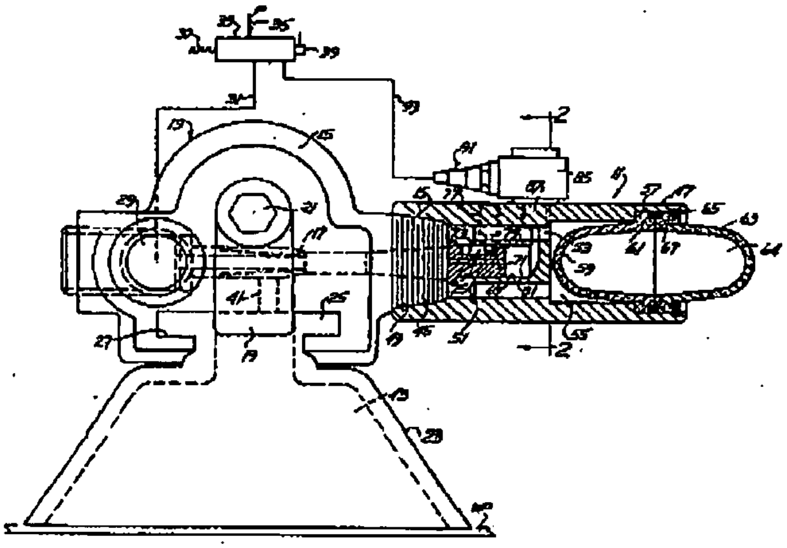


Hamilton fails to disclose various elements of Applicant's amended Claim 5. For example, Hamilton fails to disclose a plunger housing having opposite first and second ends and an axially-extending internal bore that terminates at respective first and second openings in the plunger housing first and second ends. Hamilton also fails to disclose an elongated plunger having opposite first and second ends and an axially-extending internal bore that terminates at respective first and second ports in the plunger first and second ends, wherein the plunger first end is slidably secured within the plunger housing internal bore and the plunger second end extends from the plunger housing second opening and is secured to a vacuum housing first end such that the plunger axial bore is in communication with a vacuum housing first passageway and with the plunger housing first opening. Moreover, Hamilton fails to disclose a plunger that is configured for reciprocal movement between an extended and retracted position relative to a plunger housing. Hamilton fails to disclose a plunger that is moved to an extended position upon the flow of air through a second port into the plunger housing internal bore through the plunger housing first opening.

Accordingly, Hamilton does not disclose all of the recited elements of amended independent Claim 5. As such, independent Claim 5, and all claims depending therefrom, are not anticipated by Hamilton and the rejections under 35 U.S.C. §102 are overcome.

Blatt

Blatt describes a vacuum cup venturi assembly having an air blow-off silencer. Fig. 1 of Blatt is set forth below.



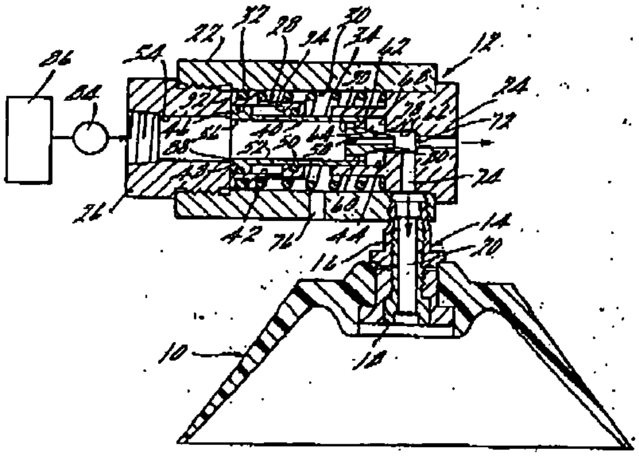
The Blatt blow-off silencer embodies a pair of hemispherically shaped frequency distorters 63 of a porous material which modifies certain sound frequency levels, lowering them below a predetermined noise level in order to accommodate noisy exhaust air from the venturi assembly 13. Pressurized air escapes through the venturi 17 for producing a vacuum due to the Bernoulli principle, vacuum being produced in chamber 41 and held as long as air flow is directed across the venturi evacuating the associated vacuum chamber.

The Action refers to element 25 of Blatt as an elongated plunger slidably secured within a plunger housing. The Action fails to identify what part of the Blatt device it considers to be the equivalent of Applicant's plunger housing. The element 25 in Blatt is an apertured T-flange that forms a part of the vacuum cup mount 23. The apertured T-flange 25 is not configured for reciprocal movement between an extended and retracted position relative to a plunger housing. Moreover, the apertured T-flange 25 does not move to an extended position upon the flow of air through a plunger housing internal bore.

Accordingly, Blatt does not disclose all of the recited elements of amended independent Claim 5. As such, independent Claim 5, and all claims depending therefrom, are not anticipated by Blatt and the rejections under 35 U.S.C. §102 are overcome.

Cagle

Cagle describes a vacuum control system in which a vacuum condition and a non-vacuum condition are established by starting and stopping air flow through a vacuum creating device. Fig. 1 of Cagle, which illustrates the vacuum forming device with attached vacuum cup, is set forth below.



The Cagle device includes a relatively large diameter vacuum cup 10 connected to a vacuum creating device 12 by a threaded coupling 14 comprising a connector member 16 and a locking bolt 18 defining a central air passage 20. The vacuum creating device 12 comprises an annular housing 22 closed at one end by an annular vacuum forming venturi plug 24 and at the other end by an annular air connection plug 26. An annular axially movable outer sleeve member 28 is slidably mounted on the inner peripheral surface 30 of the housing and sealed relative thereto by sealing means 32. A compression spring 34 is mounted between the sleeve member 28 and the venturi plug 24 to normally bias the sleeve member to an extended position in abutting engagement with the air connection plug 26. The spring 34 is mounted circumjacent hub portions 36, 38 of the outer sleeve member 28 and the venturi plug 24, respectively. An annular movable inner sleeve member 40 provides an axially movable vacuum forming member slidably mounted at one end in an annular chamber 42 in the outer sleeve member 28 and at the other end in annular chamber 44 in the venturi end plug 24. A central air passage extending through the vacuum creating device comprises an annular air inlet portion 54 in the end plug; an annular air inlet chamber 56, an annular centrally located air nozzle portion 58, and a plurality of radially outwardly located and circumferentially spaced annular bypass passages 60, 62, there being six in the presently preferred embodiment, in the inner sleeve member 40; a relatively large diameter annular bypass chamber 64 defined by sleeve member 40 and venturi plug 24 in a release position of FIG. 1, an annular outlet chamber 66 of smaller diameter than the bypass chamber and connected thereto by a transverse shoulder 68, and an annular outlet passage 70 of smaller diameter than the outlet chamber 66 and connected thereto by a tapered shoulder 72 in the venturi end plug 24. A transverse vacuum passage 74 is connected to chamber 66 adjacent the tapered shoulder 72 and a transverse vent passage 76 connects the interior of housing 22 to the atmosphere to prevent accumulation of high pressure air therewithin which might block movement of the sleeves 28, 40.

Cagle fails to disclose various elements of Applicant's amended Claim 5. For example, Cagle fails to disclose a plunger housing having opposite first and second ends and an axially-extending internal bore that terminates at respective first and second openings in the plunger housing first and second ends. Cagle also fails to disclose an elongated plunger having opposite first and second ends and an axially-extending internal bore that terminates at respective first and second ports in the plunger first and second ends, wherein the plunger first end is slidably secured within the plunger housing internal bore and the plunger second end extends from the plunger housing second opening and is secured to a vacuum housing first end such that the plunger axial bore is in communication with a vacuum housing first passageway and with the plunger housing first opening. Moreover, Cagle fails to disclose a plunger that is configured for reciprocal movement between an extended and retracted position relative to a plunger housing. Cagle fails to disclose a plunger that is moved to an extended position upon the flow of air through a second port into the plunger housing internal bore through the plunger housing first opening.

Accordingly, Cagle does not disclose all of the recited elements of amended independent Claim 5. As such, independent Claim 5, and all claims depending therefrom, are not anticipated by Cagle and the rejections under 35 U.S.C. §102 are overcome.

§103 Rejections Are Overcome

A determination under §103 that an invention would have been obvious to someone of ordinary skill in the art is a conclusion of law based on fact. *Panduit Corp. v. Dennison Mfg. Co.* 810 F.2d 1593, 1 U.S.P.Q.2d 1593 (Fed. Cir. 1987), *cert. denied*, 107 S.Ct. 2187. After the involved facts are determined, the decision maker must then make the legal determination of whether the claimed invention as a whole would have been obvious to a person having ordinary skill in the art at the time the invention was unknown, and just before it was made. *Id.* at 1596. The United States Patent and Trademark Office (USPTO) has the initial burden under § 103 to establish a *prima facie* case of obviousness. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988).

To establish a *prima facie* case of obviousness, the prior art reference or references when combined must teach or suggest *all* the recitations of the claims, and there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. M.P.E.P. § 2143. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. M.P.E.P. § 2143.01(citing *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990)). As emphasized by the Court of Appeals for the Federal Circuit, to support combining references, evidence of a suggestion, teaching, or motivation to combine must be **clear and particular**, and this requirement for clear and particular evidence is not met by broad and conclusory statements about the teachings of references. *In re Dembiczak*, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999). In an even more recent decision, the Court of Appeals for the Federal Circuit has stated that, to support combining or modifying references, there must be **particular** evidence from the prior art as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed. *In re Kotzab*, 55 U.S.P.Q.2d 1313, 1317 (Fed. Cir. 2000).

Furthermore, as recently stated by the Federal Circuit with regard to the selection and combination of references:

> This factual question of motivation is material to patentability, and could not be resolved on subjective belief and unknown authority. It is improper, in determining

> whether a person of ordinary skill would have been led to this combination of references, simply to "[use] that which the inventor taught against its teacher." W.L. Gore v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983). Thus the Board must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency's conclusion....

In re Sang Su Lee, 277 F.3d 1338, 1343 (Fed. Cir. 2002).

For at least the same reasons set forth above with respect to 35 U.S.C. §102, Applicants respectfully assert that the primary references, Hamilton, Blatt and Cagle, fail to teach or suggest various elements of Applicant's amended independent Claim 5.

The secondary reference, Persson, describes a vacuum lifting plate 12 that includes a lower plate 16. Mounted on the underside of the lower plate 16 is a plate 18 made of elastic airtight material. Arranged between the lower plate 16 and the plate 18 is a filter 34 in the form of a net or the like. Persson fails to rectify the deficiencies of the primary references. Specifically, Persson fails to disclose a plunger housing having opposite first and second ends and an axially-extending internal bore that terminates at respective first and second openings in the plunger housing first and second ends. Persson also fails to disclose an elongated plunger having opposite first and second ends and an axially-extending internal bore that terminates at respective first and second ports in the plunger first and second ends, wherein the plunger first end is slidably secured within the plunger housing internal bore and the plunger second end extends from the plunger housing second opening and is secured to a vacuum housing first end such that the plunger axial bore is in communication with a vacuum housing first passageway and with the plunger housing first opening. Moreover, Persson fails to disclose a plunger that is configured for reciprocal movement between an extended and retracted position relative to a plunger housing. Persson fails to disclose a plunger that is moved to an extended position upon the flow of air through a second port into the plunger housing internal bore through the plunger housing first opening.

Because Persson fails to teach or suggest various of the elements of Applicant's independent Claim 5, the combination of Persson and any of the primary references also fails to teach or suggest the recited elements of Applicant's independent Claim

5. Accordingly, independent Claim 5 and all claims depending therefrom are not rendered obvious by any of the primary references alone or in combination with Persson.

Applicant's independent Claim 19 recites a method of sterilizing an egg lifting apparatus that includes a vacuum housing having first and second passageways, a venturi assembly that produces subatmospheric pressure within the second passageway upon the flow of air through the first passageway, and a flexible cup secured to the vacuum housing that comprises an interior in fluid communication with the vacuum housing second passageway. The recited method steps are:

> immersing the flexible cup in a bath of cleaning solution; and
>
> inducing vacuum within the interior of the vacuum cup by forcing air flow through the vacuum housing first passageway, wherein contaminants are pulled upwardly through the second passageway and out the venturi assembly.

The Action states that Hamilton or Blatt or Cagle "shows the structural limitations as recited in Claim 1, but each reference does not show a method of immerging the suction cup in a bath of cleaning solution so that the contaminates are cleaned out." (Action, Page 4). The Action states that Lewis "shows a suction cup (31) being immerged in a cleaning solution or bat (46) (Fig. 12) to clean up the contaminates" and states that Cosgrove "also shows a suction cup (3) being immerged in a cleaning solution or bath (5)." (Action, Page 4). The Action then concludes that it would have been an obvious design choice to those skilled in the art to provide a cleaning solution on the suction cup of Hamilton or Blatt or Cagle as taught by Lewis or Cosgrove. (Action, Pages 4-5).

Applicant respectfully submits that the Action has failed to establish a *prima facie* case of obviousness because the combination of Hamilton or Blatt or Cagle with Lewis or Cosgrove fails to teach or suggest *all* the recitations of independent Claim 19. None of the references teaches or suggests immersing a flexible cup in a bath of cleaning solution and then inducing vacuum within the cup ***by forcing air flow through the vacuum housing first passageway, wherein contaminants are pulled upwardly through the second passageway and out the venturi assembly***. Moreover, there is no teaching or suggestion in Lewis or Cosgrove to utilize a venturi assembly to pull cleaning solution upwardly within a flexible cup and out through the venturi assembly. In addition, none of the uses of the various vacuum cup devices of Hamilton, Blatt, and Cagle requires or even suggests the need for sterilization with a cleaning solution. Accordingly, none of the references, alone or in combination, teaches or suggests the recitations of Applicant's independent Claim 19.

Accordingly, Applicant respectfully requests withdrawal of the present rejections under 35 U.S.C. §103.

In view of the above, it is respectfully submitted that this application is in condition for allowance, which action is respectfully requested.

Respectfully submitted,

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Erin A. Campion